Amendments to the Claims:

    This listing of claims will replace all prior versions, and listings of claims in the application. Applicant has submitted a new complete claim set showing marked up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing.

Listing of Claims:

1.   (Currently amended) A ~~computer-implemented~~ method ~~for modifying a previously applied action in an application, the method~~ comprising:

    recording ~~at least one~~ action information pertaining to a first ~~corresponding to a first application and an associated relationship between the at least one~~ action executed in a ~~of the~~ first computer application;

    identifying a cross-source ~~and~~ relationship between the first action and a ~~recorded~~ second action ~~of~~ executed in a second computer application, the first computer application being a different computer application from the second computer application;

    executing a first action management operation on the ~~at least one~~ first action ~~of the first application, the first operation causing a first modification to the at least one action of the first application;~~

    responsive to executing the first action management operation, executing a second action management operation on the ~~recorded action of the~~ second ~~application responsive to the execution of the first operation on the at least one~~ action ~~of the first application and~~ based on the identified relationship; and ~~between the at least one action of the first application and the recorded action of the second application, the second~~

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~~operation causing a second modification to the recorded action of the second~~

~~application corresponding to the first modification to the action of the first application~~

outputting a result corresponding to executing the first action management

operation or the second action management operation.

2.   (Currently amended) The method of claim 1 ~~further comprising:~~wherein the

cross-source relationship includes a predecessor-successor relationship between

~~registering~~ the first ~~application with an~~ action ~~management module that receives~~

and the second action ~~information about actions associated with multiple applications~~.

3.   (Currently amended) The method of claim ~~1~~ 2 ~~further comprising:~~wherein

execution of ~~registering~~ the second ~~application with an~~ action is dependent on the

execution of the first ~~management module that receives~~ action ~~information about~~

~~actions associated with multiple applications~~.

4.   (Currently amended) The method of claim ~~1~~ 3 ~~further comprising:~~wherein the

first action is a different ~~detecting selection of the recorded~~ action from the second and

the ~~of the first application from a plurality of recorded actions of the first application~~

~~and the~~ second ~~application~~action is not executed if the first action is not executed.

5.   (Currently amended) The method of claim ~~1~~ 3 ~~further comprising:~~wherein the

first action is a different action from ~~displaying recorded actions of the first application~~

~~and~~ the second action and execution of the first action generates results that are

different from results generated by execution of the ~~secion action~~application in

~~accordance with causal relationships among the recorded actions~~.

6. (Currently amended) The method of claim 1 ~~further comprising:~~wherein execution of the first action generates a ~~displaying recorded actions of the~~ first result of the first computer application and executing the first action management operation includes modifying the first result of the first action~~the second application in accordance with chronological relationships among the recorded actions~~.

7. (Currently amended) The method of claim ~~1~~6 wherein execution of the second ~~the first modification comprises an undo of the~~ action generates a second result of the second computer ~~of the first~~ application and executing the second action management operation includes modifying the second result of the second~~, the undo causing a compensation of the~~ action ~~of the first application~~.

8. (Currently amended) The method of claim ~~1~~7 wherein the first action management operation includes one of undoing, redoing, or fixing~~modification comprises a: redo of the action of the first application, the redo causing an execution of a previously inactive action~~.

9. (Currently amended) The method of claim ~~1~~8 wherein the first action management operation includes undoing ~~modification comprises:~~

    ~~replacing the action of~~the first ~~application with another~~action and rolling back the first result.

10.   (Currently amended) The method of claim 9 wherein the <u>second</u> action management operation includes the second ~~of the first application and the other~~ action<u>,</u> and wherein undoing the second ~~are of a different~~ action <u>includes rolling back the second result</u>~~type~~.

11.   (Currently amended) The method of claim ~~1~~<u>10</u> wherein the <u>second action is a</u> different ~~first modification comprises:~~
        ~~replacing the~~action <u>from</u> ~~of~~ the first ~~application with another~~action ~~of the same action type~~ having different action parameters.

12.   (Currently amended) The method of claim ~~1~~<u>8</u> wherein the first <u>action management operation includes fixing the first action, the fixing including</u>~~modification comprises~~:
        <u>undoing a dependent action, the dependent action being dependent on the first action;</u>
        ~~replacing the~~<u>undoing a dependent</u> action<u>, the dependent action being dependent on</u> ~~of~~ the first ~~application with multiple actions~~<u>action;</u>
        <u>undoing the first action;</u>
        <u>receiving a corrected action corresponding to the first action;</u>
        <u>executing the corrected action; and</u>
        <u>redoing the dependent action.</u>

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13.   (Currently amended) The method of claim ~~1~~ 7 wherein the second ~~step of recording at least one action includes recording a plurality of actions corresponding to the first~~ application is inactive and executing the second~~, the plurality of actions including the at least one~~ action management operation includes:

        activating the second application; and

        accessing the second ~~at least one dependent~~ action management operation on the second action based ~~dependent~~ on the ~~at least one action~~activating.

14.   (Currently amended) The method of claim 1 wherein the cross-source relationship includes an atomic parcel relationship between ~~second application is inactive, the~~ first action and ~~method further comprising:~~

        ~~executing the inactive~~ second ~~application responsive to the execution of the first operation~~action.

15.   (Currently amended) The method of claim 1 wherein executing the first action management operation includes:

        displaying a plurality of first computer ~~second~~ application actions executed in the first computer application, wherein the plurality of first computer application actions includes the first action;

        receiving a selection of the first action in the plurality of first computer application actions; and

        executing the first action management operation on the selected first action~~comprises a document object~~.

16.   (Currently amended) The method of claim ~~13~~ 1 wherein identifying the cross-source relationship ~~executing the first operation on the at least one action~~ includes

receiving a related action identifier from ~~automatically executing~~ the first <u>computer application, the related</u> ~~operation on the at least one dependent~~ action <u>identifier indicating the cross-source relationship between</u> ~~in response to executing~~ the first action <u>and</u> ~~operation on~~ the second ~~at least one~~ action.

17.   (Currently amended) The method of claim 1 wherein the ~~recording includes recording a sequence of actions of the first application in a~~ first action<u>, the</u> ~~log and a sequence of actions of the second application in a~~ second action ~~log~~, the ~~recorded associated relationship comprising a dependency of an action in the sequence of actions of the second application on an action in the sequence of actions of the first application,~~

and ~~wherein the~~ first ~~operation causes a modification in the~~ action <u>management operation, and the second</u> ~~and a subsequent~~ action <u>management</u> ~~in the sequence of actions of the first application and the execution of the second~~ operation <u>are executed by</u> ~~,~~ the ~~second operation causing~~ a <u>single user</u>~~substantially similar modification in the action in the sequence of actions of the second application~~.

18.   (Currently amended) A computer readable storage medium encoding a computer program for executing on a computer system a computer process, the computer process comprising:

recording ~~at least one~~ action <u>information pertaining to an</u> ~~corresponding to a first application and an associated relationship between the at least one~~ action of the first <u>computer-related source</u>~~application and a recorded action of a second application~~;

<u>recording a related action identifier corresponding to the action of the first computer-related source, the related action identifier for indicating an associated relationship with a recorded action of a second computer-related source, the first</u>

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computer-related source being a different computer-related source from the second computer-related source;

displaying the action information including the action of the first computer-related source and at least one action management operation;

receiving a selection of the action of the first computer-related source and the at least one action management operation;

executing ~~an action management operation on~~ the selected at least one action management operation ~~of the first application and the recorded action of the second application based~~ on the ~~relationship between the at least one~~selected action of the first ~~application and the recorded action of the second application~~computer-related source;

executing the selected at least one action management operation on the recorded action of the second computer-related source based on the associated relationship; and

outputting a result corresponding to executing the selected at least one action management operation on the selected action of the first computer-related source or on the recorded action of the second computer-related source~~,~~

~~wherein the at least one action of the first application and the recorded action of the second application are modified based on the action management operation.~~

19.   (Currently amended) The computer readable storage medium of claim 18 wherein executing the selected at least one action management operation on the recorded action of the second computer-related source ~~the computer process further~~ comprises:

identifying ~~registering~~ the related ~~first application with an~~ action identifier;

comparing the related action identifier to the recorded action of the second computer-related source; and

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executing the selected at least one action management operation on the recorded ~~module that receives~~ action of the second computer-related source based on the comparing ~~information about actions associated with multiple applications~~.

20.   (Currently amended) The computer readable storage medium of claim ~~18~~ 19 wherein executing the selected at least one action management operation on the recorded action of the second computer-related source ~~the computer process further~~ comprises~~:~~ executing ~~registering~~ the selected at least one ~~second application with an~~ action management operation on the recorded ~~module that receives~~ action only if the related action identifier matches the recorded action~~information about actions associated with multiple applications~~.

21.   (Currently amended) The computer readable storage medium of claim 18 wherein the first computer-related source ~~process further~~ comprises~~:~~ a ~~detecting selection of the recorded action of the~~ first computer application and the second computer-related source comprises a second computer application, ~~from a plurality of recorded actions of~~ the first computer application being a different computer application from ~~and~~ the second computer application.

22.   (Currently amended) The computer readable storage medium of claim ~~18~~ 21 wherein the second computer application is inactive and wherein executing the selected at least one action management operation on the recorded action of the second computer-related source ~~process further~~ comprises:

activating the second computer ~~displaying recorded actions of the first~~ application; and

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executing ~~and~~ the <u>selected at least one action management operation on the recorded action of the activated</u> second <u>computer</u> application ~~in accordance with causal relationships among the recorded actions~~.

23.   (Currently amended) The computer readable storage medium of claim ~~18~~ <u>21</u> wherein <u>recording action information pertaining to an action of</u> the first computer<u>-</u> related source ~~process further~~ comprises:

    <u>receiving a first log of</u> ~~displaying recorded~~ actions <u>from</u> ~~of~~ the first <u>computer</u> application<u>. the first log of actions including actions executed on the first computer application; and</u>

    <u>receiving a second log of</u> actions from ~~and~~ the second <u>computer</u> application<u>, the second log of actions including</u> ~~in accordance with chronological relationships among the recorded~~ actions <u>executed on the second computer application</u>.

24.   (Currently amended) The computer readable storage medium of claim ~~18~~ <u>23</u> wherein <u>recording a related action identifier includes receiving</u> the <u>related</u> action identifier <u>from the first computer application</u> ~~management operation comprises~~
    ~~an undo action~~.

25. (Currently amended) The computer readable storage medium of claim ~~18~~ 24 wherein executing the selected at least one action management operation on the recorded action of the second computer-related source includes:

    comparing the related action identifier received from the first computer application to the recorded action of the second computer-related source; and

    executing the selected at least one ~~comprises a redo~~ action management operation on the recorded action of the second computer-related source based on the comparing.

26. (Currently amended) The computer readable storage medium of claim ~~18~~ 25 wherein executing the selected at least one action management operation on the recorded ~~comprises~~

    ~~replacing the~~ action of the ~~first application and the recorded action of the~~ second computer-related source only if the related action identifier received from the first computer application matches the recorded ~~with another~~ action.

27-34. (Canceled)

35. (Currently amended) A system comprising:

    a memory including:

    a first application program;

    a second application program, the second applicationa program being a different application program from the ~~component comprising a first action log, the first action log including at least one action corresponding to a~~ first application program;

    an action management module including:

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an ~~a second component comprising a second~~ action log

containing an~~, the second~~ action identifier identifying a first ~~log including~~

~~an~~ action executed by the first application and a corresponding related

action identifier identifying ~~corresponding to~~ a second action executed by

the second application program, the first ~~and an associated relationship~~

~~with the at least one~~ action and the second action being related by a

cross-source relationship,

    a processor for executing ~~corresponding to~~ the first application program, the

second application program, and the action management module; ~~; and~~

    an input interface for receiving a command input,

    wherein, responsive to the input interface receiving the command input, the ~~a~~

~~third component comprising an~~ action management module executes ~~executing an~~

~~action management~~ operation on the first action, identifies the second action based on

the cross-source relationship, and, based on the execution of the operation on

~~corresponding to the second application and~~ the first ~~at least one~~ action, executes the

operation on the ~~of the first application,~~

    ~~wherein execution of the action management operation causes a modification of~~

~~the action corresponding to the second application and a corresponding modification of~~

~~the at least one action of the first application.~~

36.   (Currently amended) A method comprising:

    ~~recording action information for one or more logical actions of a first computer-~~

~~related source and an associated relationship with a recorded logical action of a second~~

~~computer-related source,~~

    ~~displaying the recorded action information~~

    receiving first input commands from a user;

executing a first sequence of actions in a first computer application responsive to the first input commands;

receiving second input commands from the user;

executing a second sequence of actions in a second computer application responsive to the second input commands, the second computer application being a different computer application from the first computer application;

generating a first action log indicating the first sequence of actions and a second action log indicating the second sequence of actions;

receiving a selection from the user of an action, the action selected by the user being selected from the first action log;

receiving a third input from the user for executing an operation on the selected action from the first action log;

executing the operation on the selected action from the first action log based on the third input;

identifying a cross-source relationship between the action selected by the user from the first action log and an action in the second action log;

responsive to identifying the cross-source relationship, executing the operation on the identified action from the second action log; and

outputting results corresponding to execution of the operation on the selected action from the first action log or the action from the second action log.

37-42. (Canceled)

43.   (Currently amended) A computer-readable medium storing a data structure comprising:

a first data field

~~storing~~ an action identifier ~~for~~ identifying a primary action stored within a first data field, the primary action including an executed action by a first computer-related source;

~~a second data field storing~~ a source identifier ~~for~~ stored within a second data field and identifying the ~~a~~ first computer-related source associated with the action identifier, the source identifier being stored within the second data field;

~~a third data field storing~~ a related action identifier stored within a third data field and identifying a secondary action ~~for a~~ related to the primary action, the secondary action being executed by a second computer-related source, the second computer-related source being a different computer-related source from the first computer-related source; and

~~a fourth data field storing~~ a source identifier stored within a fourth data field and ~~for~~ identifying a second computer-related source associated with the related action identifier.

44.   (Currently amended) The computer-readable medium of claim 43 wherein the data structure further comprises:

~~a fifth field storing~~ a relationship descriptor stored in a fifth data field and specifying the relationship between the primary action and the ~~related~~ secondary action.

45.   (Currently amended) The computer-readable medium of claim 43 wherein the data structure further comprises:

~~a fifth field storing~~ a container action identifier stored in a fifth data field and identifying a container action containing the primary action within ~~the~~ an action hierarchy.

46. (Currently amended) The computer-readable medium of claim 43 wherein the data structure further comprises:

~~a fifth field storing~~ a component action identifier <u>stored in a fifth data field and</u> identifying a component action contained by the primary action within ~~the~~ <u>an</u> action hierarchy.

47. (Currently amended) The computer-readable medium of claim 43 wherein the data structure is recorded in an action log and further comprising:

~~a fifth field storing~~ an inactive flag <u>stored in a fifth data field and</u> indicating that the primary action has been made inactive but the data structure remains persistent <u>in</u> the action log.

48. (Currently amended) The computer-readable medium of claim 43 wherein the data structure further comprises:

~~a fifth field storing~~ an action descriptor <u>stored in a fifth data field and</u> describing the primary action.

49. (New) The method of claim 1 further comprising receiving a first log of actions from the first computer application and a second log of actions from the second computer application, the first log of actions including actions executed in the first computer application and the second log of actions including actions executed in the second computer application.

50. (New) The method of claim 49 wherein at least one action in the first log of actions has a cross-source relationship with at least one action in the second log of actions.

51.   (New) The method of claim 49 wherein each action in the first log of actions and each action in the second log of actions includes an action identifier for identifying the corresponding action.

52.   (New) The method of claim 49 wherein the first log further contains a first source identifier for identifying the first computer application and the second log further contains a second source identifier for identifying the second computer application.

53.   (New) The method of claim 52 wherein the first source identifier and the second source identifier are different.

54.   (New) The method of claim 1 further comprising:

displaying a plurality of first computer application actions executed in the first computer application, wherein the plurality of first computer application actions includes the first action;

displaying a plurality of action management operations wherein the plurality of action management operations includes the first action management operation;

receiving a selection of the first action in the plurality of first computer application actions; and

receiving a selection of the first action management operation in the plurality of action management operations.

55.   (New) The method of claim 54 wherein identifying a cross-source relationship includes receiving a related action identifier corresponding to the first action, the related

action identifier for indicating a cross–source relationship between the first action and the second action.

56.   (New) The method of claim 55 wherein executing the first action management operation on the first action includes executing the selected first action management operation on the selected first action.

57.   (New) The method of claim 56 wherein executing the second action management operation on the second action includes:

   comparing the related action identifier to the second action; and

   executing the second action management operation based on the comparing.

58.   (New) The method of claim 57 wherein executing the second action management operation based on the comparing comprises executing the second action management operation if the related action identifier matches the second action, otherwise not executing the second action management operation on the second action.